S1 32"-65"
USER MANUAL

Premier™ Series

VANISHING MIRROR DISPLAY

SÉURA®

www.seura.com

Thank you for selecting a Séura Mirror Display.

This product has been inspected and packaged carefully before shipment.
Please read this guide before beginning installation.

Please keep this manual for future reference.

Information in this manual is subject to change without prior notice.

FCC Information

This equipment has been tested and found to comply with limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and radiates radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

There is no guarantee that interference will not occur in a particular installation. If this equipment causes unacceptable interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced Radio/TV technician for additional help.

WARNINGS

To reduce the risk of fire, electrical shock and other injuries, keep these safety precautions in mind when installing, using, and maintaining your Mirror Display. The socket-outlet should be installed near the equipment and be easily accessible. The TV should be connected to a grounded GFCI protected main socket outlet.

WARNING: If you manipulate against the recommended usage, serious injury or death to user may result.

To protect against electric shock, do not immerse the power cord, power plug, or product in water or other liquid.

Do not overload AC outlets or extension cords. Overloading can cause fire or electric shock.

Close adult supervision is necessary when any product is used by or near children.

Do not operate any product with a damaged cord or plug or operate it after the appliance malfunctions or has been damaged in any manner.

Do not use the product close to any heat sources such as radiators, heat registers, stoves, or other products that produce heat.

Do not let the power cord come in contact with hot surfaces.

If you notice any smoke or scorched smell near the product, unplug power cord and refer to qualified personnel for service and/or repair.

Do not use or place any combustible or flammable substances near the product.

To electrically disconnect the product, turn OFF the product, then remove the electrical power plug from the outlet.

Do not place heavy articles on or step on the product.

Do not place the product on an unstable cart, stand, tripod or table.

Do not use this product for other than intended use.

This Séura product is only intended for use indoors.

This product is not waterproof. Do not immerse this product in water and/or expose to dripping or splashing water.

For added safety during a lighting storm, or when this product is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna.

Specifications of this product are subject to unannounced changes; this manual may thus not reflect the current technical status.

Before Installation

WARNING: READ ALL INSTRUCTIONS AND REVIEW ALL DRAWING SHEETS BEFORE ATTEMPTING TO INSTALL OR SERVICE THIS PRODUCT.

When installing and during use of this product, basic safety precautions should always be followed to reduce the risk of fire, electric shock and/or injury to persons including the following:

- Inspect the desired location for installation and be aware of all electrical wiring pathways, water pipes, gas lines, or other potentially hazardous conditions that may exist to protect from accidental damage during creation of on-site conditions.
- Ensure all required electrical specifications are adhered to and have been installed by the appropriate individuals and are code approved.
- Ensure all framing requirements, if needed, have been completed to building code and pose no structural issues.
- It is REQUIRED that this product is plugged into an electrical outlet protected by a Ground Fault Circuit Interrupter (GFCI) to protect against electric shock, fire, and/or injury. Failure to do so will void any warranty for this product.
- Only qualified individuals should attempt to service the product. Removing covers can expose you to high voltage and other dangerous conditions.
- To protect against electric shock, do not immerse the power cord, power plug, or product in water or other liquid.
- Do not overload AC outlets or extension cords. Overloading can cause fire or electric shock.
- Close adult supervision is necessary when any product is used by or near children.
- Do not operate any product with a damaged cord or plug or operate it after the appliance malfunctions or has been damaged in any manner.
- Do not let the power cord come in contact with hot surfaces.
- To electrically disconnect the product, turn OFF the product, then remove the electrical power plug from the outlet.
- Do not use this product for other than intended use.
- This Séura product is only intended for use indoors.
- This Séura product is not waterproof. Do not immerse this product in water and/or expose to dripping or splashing water as this could cause an electrical hazard.
- Retain this manual in a safe place for future reference.

Warnings:

Do not handle or remove your mirror display from the packaging until it is ready to be installed.

To avoid damage to the mirror display, only transport it in a vertical position. Transporting the product horizontally may permanently warp the mirror.

It is highly recommended that at least three (3) persons assist in the installation of the mirror display.

Mirror suction cups are not recommended for use in the installation of your mirror display.

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Lighting and Performance

The environment in which the mirror display is installed will affect the product performance. The key factors to consider for proper installation are surroundings and ambient light. Use the following guidelines to maximize the performance of the Séura product:

Type of Lighting

Avoid direct natural sunlight and excessive fluorescent lighting. These conditions will diminish the television brightness and hinder its performance.

Light Direction

Avoid directing light toward the mirror. Position lights such that they illuminate objects in the room, not the mirror itself. For example, lights on the wall next to the mirror are more favorable than lighting located on the ceiling in the center of the room.

Background Colors

Sidewalls and furnishings that are dark, uniform, and non-reflective will provide better performance of the display. Bright colors, patterns, and contrasting colors will minimize the quality of the display.

DO use ambient or indirect lighting that illuminates the room, not the Mirror Display.

DO use shades or window treatments to block outdoor light that would interfere with picture performance.

DO NOT position lighting directly on the Mirror Display. This will wash out the picture and hinder the product's performance.

DO NOT position the product opposite bright, untreated windows. Natural lighting will interfere with picture performance.

Care and Maintenance

Our patented mirror technology has been developed to completely protect the mirror surface and allow easy maintenance. Please follow the guidelines listed for proper mirror care and cleaning:

- The glass surface can be cleaned with any conventional non-ammoniated glass cleaner. Care should be taken to use only a soft lint-free cloth. Apply all cleaners directly to the cloth and not the mirror surface. Never saturate the mirror surface as residual cleaner may seep behind the mirror.
- Stubborn spots can be removed with solvents such as mineral spirits, de-natured alcohol, and acetone. Immediately remove solvent and dirt residues per the prescribed methods above with a compatible glass cleaner or water.

Display Requirements

Operation and Storage Requirements

The ambient temperature for operating the device is between 41 to 122 degrees Fahrenheit. Do not install the device in the proximity of heat sources, such as heating pipes, heaters, furnaces or other devices that radiate heat. Mount the device in such a way that it is protected against moisture. Trouble free operation is ensured up to 75% air humidity. To prevent fire or electric shock, never allow liquids to enter the unit. The product must be stored in dry and well-ventilated rooms, without extreme temperature fluctuations. Heat sources and aggressive active substances may not be stored in the proximity of the device. The required storage temperature is 32° F - 140° F at an air humidity of 5 - 85% RH non-condensing. The device must be stored in the complete packaging, as delivered.

Installation Environment

Avoid direct light or sun exposure, direct proximity to heat sources, outdoor installation. The product is specifically designed for indoor use only. There is the danger of fire and of electric shock and damage to the device if it is operated outdoors. Do not place any heat sources such as radiators and heat registers, etc. near the monitor. To reduce eye strain, avoid installing the Séura Mirror Display against a bright background such as a window. Position the monitor at the height of your eye level. Position the monitor directly in front of you at a comfortable viewing distance.

Installation

Have this product installed by qualified personnel only. Use the mounting systems which are specified or recommended by Séura. Install the product in a way that it is fixed properly and take care that children are not exposed to danger. Please take extra care during installation, avoid impacts. Before cabling your monitor, check that the power is off. To avoid any possibility of electric shock, always connect your equipment to properly grounded outlets. Use of power cords or adapters other than those provided may cause fire or malfunction. Place this product as close to the power socket as possible. Leave enough space to insert and remove the power plug on demand. Even if you switch off the product with your remote control, power is not cut off unless the power cord is unplugged.

The device may only be operated with the provided power adapter. The rated voltage is indicated on the product label. The device is factory-set to the optimal operating voltage (see Technical Specification). Use only power cords and plugs that are suitable for your local electrical outlets. Install the power cords in such a way that it does not obstruct anyone. Ensure furthermore that the cable is not clamped and that it cannot be pulled out accidentally from the power adapter. Do not install the power cords in the proximity of heating elements and never place heavy items on the cable or power adapter. Do not modify or arbitrarily repair the power cords.

CAUTION

Do not use any power cords or adapters other than those provided with this product! Use of power cords or adapters other than those provided with this product may cause fire, electric shock or malfunction. If several kinds of power cords are provided with this product, use the one that fits your power socket. Do not let the adapter hang down while using. Do not cover or wrap the adapter. Leave space around the adapter to prevent overheating. The individual components can be destroyed, if the polarity is reversed or an incorrect connection is used. A goodwill replacement is not possible in such cases, since each device is submitted to meticulous quality inspections prior to shipping. The connecting plugs must be attached in such a way that the connector is held firmly. Have trained technical personnel install the electrical facilities necessary for mounting. The power adapter must be installed in ventilated areas due to heat emission. Connect the power cord to a grounded outlet. Never cut or damage the power cord.

Please disconnect the device from the power adapter in the following cases:

1. The device is out of use for a lengthy period.

2. The device malfunctions or displays other unusual features, necessitating maintenance work.

3. During a thunderstorm.

Please plan the positioning of the power adapter and the source cables before proceeding with the structural measures and positioning of the Séura Mirror Display. Observe the protection zones when placing the power adapter! For in-wall applications please bear in mind that the power adapter has to be placed beyond the inset due to heat emission. Optional 25’ or 50’ adapter extension cables may be purchased from Séura.

NOTE

The power adapter should be adequately secured to prevent it from becoming unstable and/or falling. Make sure the power source circuits are properly grounded. Use the supplied power cord in order to connect it to the power source. If your installation requires a different power cord, be sure to use an officially approved power cord displaying the mark of the safety agency that defines the regulations for power cords in your country. Please consider that the AC outlet for the power adapter is placed within reach of the Séura Mirror Display and should be easily accessible in case it needs to be powered off.

Install the unit in a dry environment where the operating ambient temperature will not exceed 40°C / 104°F. Also, don’t position the power adapter on top of the Séura monitor system in order to prevent thermal overload. Ensure that your installation complies with your national and local safety rules. Any servicing, adjustment, maintenance or repair must be performed only by service-trained personnel.

Ensure the power adapter is installed in an accessible location, to access it easily in case of a defect. If you choose to place the power adapter in a separate space, take care that ventilation is present, because the power adapters need convection cooling for stable working conditions.

When placing the power adapter in a fully enclosed space, make sure the air flow around the sides and top of the power adapter is not restricted. According to a common rule of thumb please calculate the length of the power adapter plus an additional gap of at least 100mm all around for DC 12V power adapters and 200mm for DC 24V power adapters.

Set Up

Before using the device please check the following contents of the box for completeness:

Mirror Display

For 32", 42", 46" Monitors:

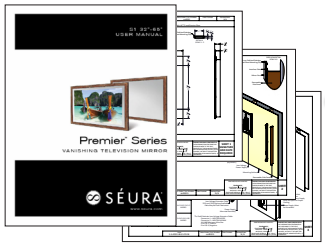
For 55" and 65" Monitors:

Low Voltage power adapter DC 24V

2.5mm to 3.5mm Adapter

Power Cord

Waterproof IR Remote Control



Manual and Custom Drawing Package

Mounting Hardware

Optional Accessories

25' Extension Cable*

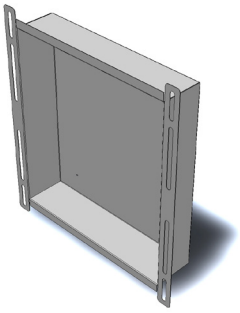
50' Extension Cable*

**To Field Fabricate Low-Voltage Extension Cable:*

Connector 1 = NEUTRIK NC4FX
Connector 2 = NEUTRIK NC4MX

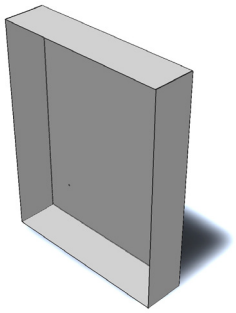
14 AWG Minimum Wire Size
Pins 1 & 2, Positive
Pins 3 & 4, Negative

Contact Séura Tech Support for More Information



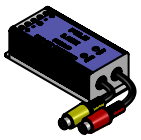
In-Wall Accessory Box for Retrofit Installation

(Or Chief Item PAC511)



In-Wall Accessory Box for New Construction

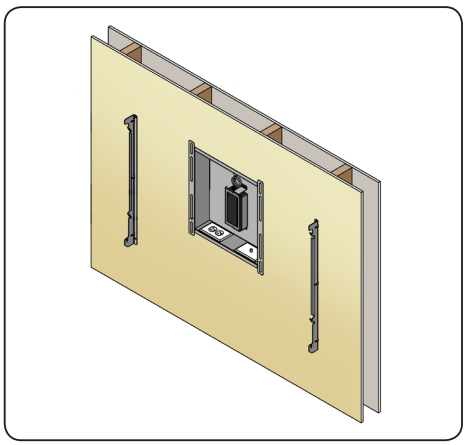
(or Chief item PAC516)



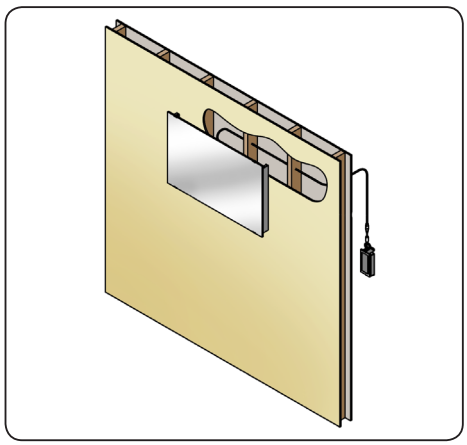
Speaker to Line-Level Adapter

Power Supply Mounting Options

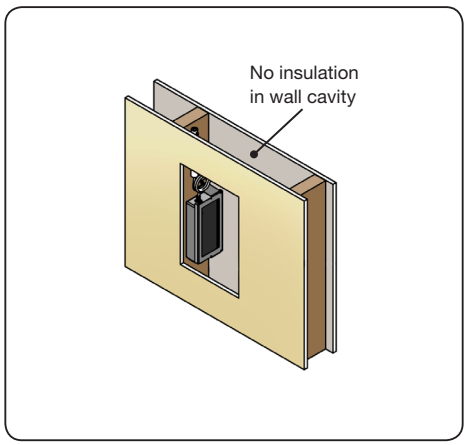
Premier™ Series Mirror Displays include an external power supply. This may be mounted in a variety of ways. To ease installation, Séura suggests the following configurations and offers the below optional parts sold separately. For more detailed information, view page 3 of the Séura drawing package.



Power Supply Mounted Behind Mirror
- In-Wall Accessories Box



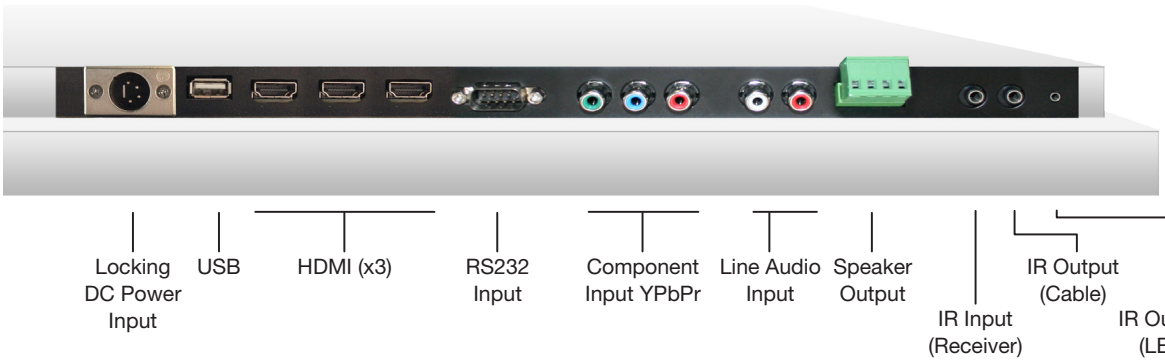
Remotely Located Power Supply
- Extension Power Cable

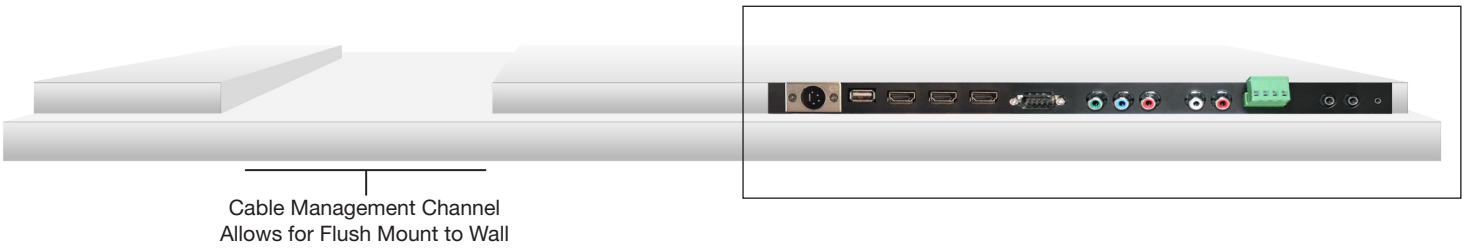


Power Supply Mounted in Wall Cavity
- Extension Power Cable (if necessary)

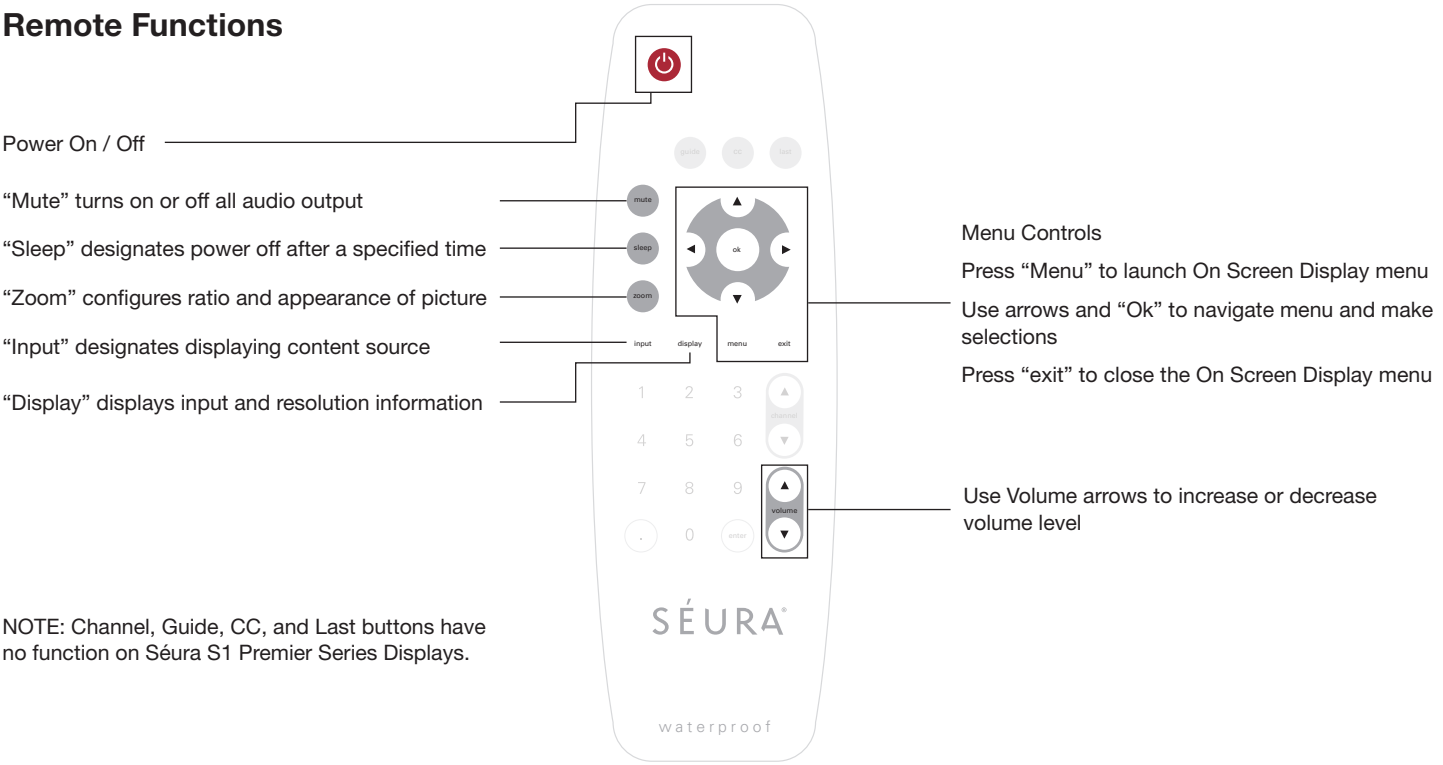
Set Up

Input/Output Overview (Top View)





Remote Functions


Power On / Off
“Mute” turns on or off all audio output
“Sleep” designates power off after a specified time
“Zoom” configures ratio and appearance of picture
“Input” designates displaying content source
“Display” displays input and resolution information
Menu Controls
Press “Menu” to launch On Screen Display menu
Use arrows and “Ok” to navigate menu and make selections
Press “exit” to close the On Screen Display menu
Use Volume arrows to increase or decrease volume level
mute
sleep
zoom
ok
input
display
menu
exit
volume
SÉURA
waterproof

NOTE: Channel, Guide, CC, and Last buttons have no function on Séura S1 Premier Series Displays.

Refer to the included custom drawing package for specific dimensions and instructions for your custom product.

1. Verify that the wall is prepared appropriately. If the product is an in-wall, or “Recessed” configuration, verify the dimensions of the rough opening.

2. Install power supply. Various options are available and shown on “Sheet 3” of the included drawing package.

3. Install mounting brackets according to the dimensions and instructions shown on “Sheet 4” of the included drawing package. Ensure mounting brackets are securely fastened using wood framing members where possible.

NOTE: Take care when moving the product. Always transport the product with at least two people.

WARNING: Always transport the product in a vertical position. Moving the product in an unsupported horizontal position may result in product flex or damage.

4. Connect power supplies and audio/video components.

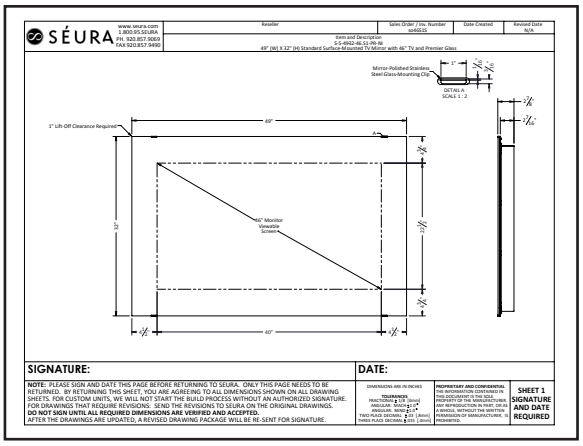
    - It is strongly recommended to test all electrical and electronic devices to verify proper integration and functionality before securely mounting it to the wall.

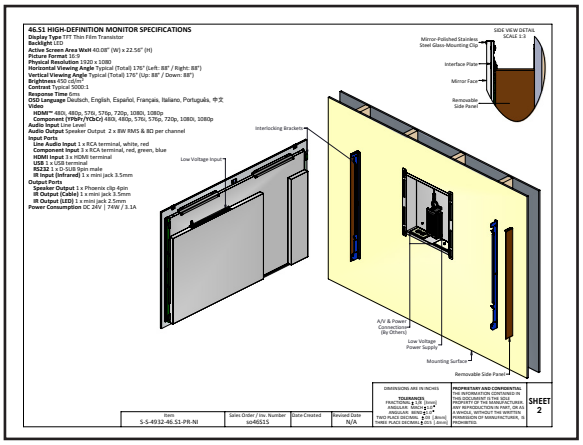
5. Position mirror display close to wall surface and securely engage mounting brackets.

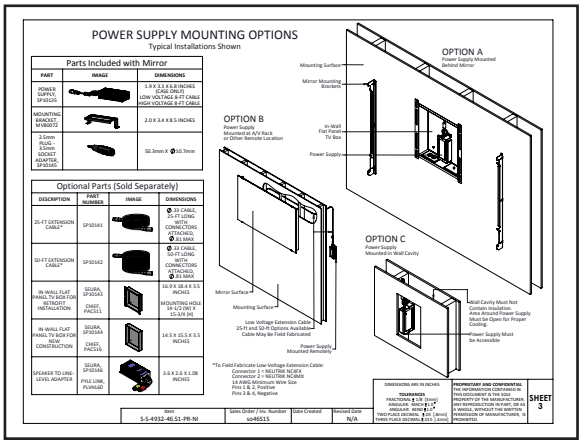
    - Allow for a ¼" ventilation gap for proper air flow and heat transfer.

6. Check to ensure the mirror display is fully engaged and secure to the mounting brackets.

7. Reference the appropriate electronics manual for mirror display operating instructions.







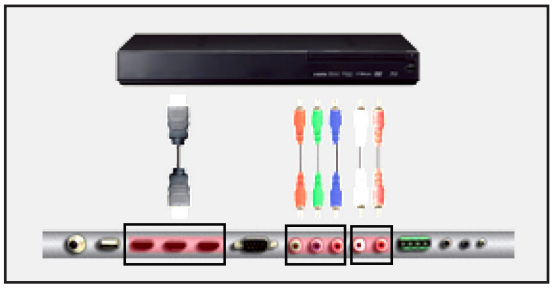
NOTE:

All Séura drawing packages indicate generalized nominal residential wood framing construction, and are not indicative of any particular building code. It is the installers responsibility that all electrical, audio/visual, and framing construction are code compliant to the municipality in which the product is being installed. Modifications made to Séura recommendations are at the sole discretion of the installer and release Séura of all liability.

Making Connections

Connecting Video

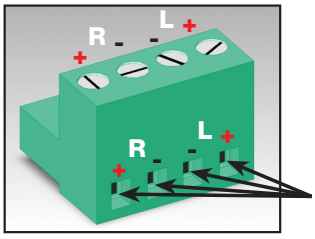
The Mirror Display features one Component and three HDMI inputs. We recommend using the HDMI inputs for best video and sound quality.

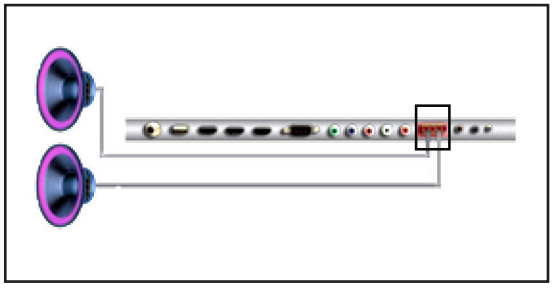


Connecting Audio

Two passive loudspeakers can be connected to the speaker output socket with speaker cables. Observe the polarity (+ and -) of the connections to avoid phase errors (= incorrect stereo playback).

Euroblock Connector



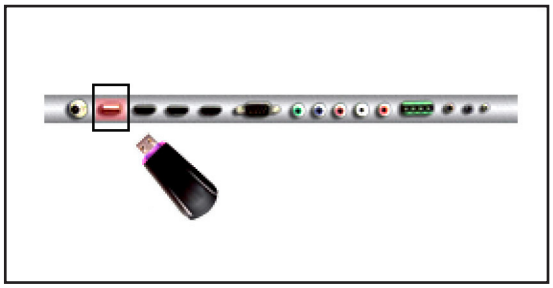


Connecting a USB Media Source

Connect an external USB media source to the USB socket to display photos, play music or install a software update.

In order to have access to the USB port after installation we recommend installing a USB extension cable.

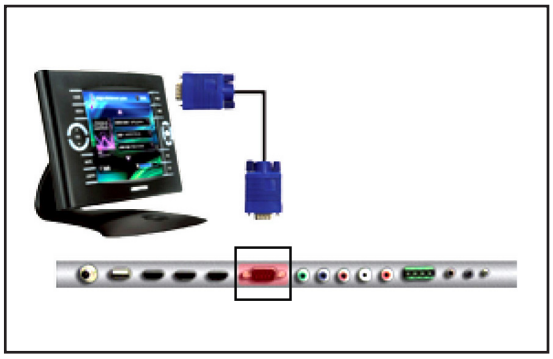
NOTE: USB input is disabled upon initial factory settings. See page 14 for instructions on how to enable or disable inputs.



Connecting a Home Automation System

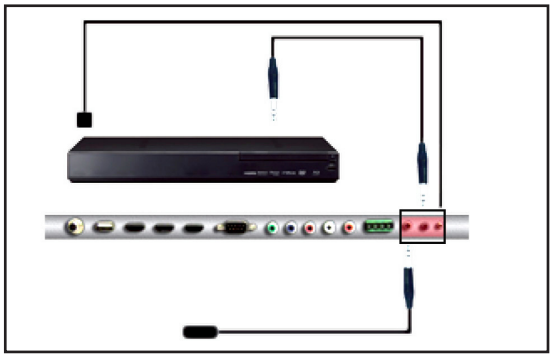
With the RS-232 interface (9 pin d-subminiature connector male) you can connect a cross linked serial cable for communication with a home automation system, PC, etc. The baud rate is adjustable from 9600 up to 38400, the default value is 38400.

RS-232 access: see section Service Settings.



Connecting an external IR-transmitter and Receiver

With the IR input interface you can connect an external IR receiver to the Séura Mirror Display. When you connect an external IR reveicer, the internal IR receiver is deactivated automatically. With the IR output terminals (cable or LED) you can loop through the IR signal from the remote control to an external device with a corresponding IR input (CABLE) or via an IR emiter diode affixed in front of the IR receiver eye (LED). Use the supplied 2.5mm to 3.5mm adapter with this jack.

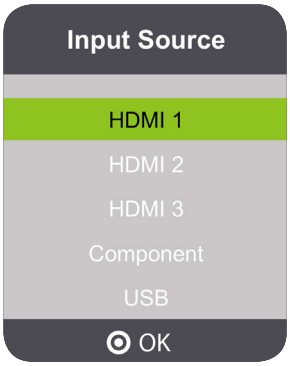


On Screen Display Menu (OSD)

Input Source Selection

In the Input Source menu, you may select from the available input sources.

1. Press to power the Mirror Display on
2. Press to display the Input Source list
3. Press or until the desired Input Source is highlighted.
4. Press to confirm selection of the chosen input and clear the Input Source list from the screen or press again to switch through the signal inputs.
5. Press to close the Input Source list without selecting an alternative source.



On Screen Display Menu (OSD)

In the on screen display menu (OSD) you can adapt the characteristics of your display based on personal preferences. OSD menus include **Image Settings, Display Settings, Audio Settings, OSD Settings, Setup Settings and Service Settings.**

1. Press on your remote control to open the OSD menu.
2. Navigate within the OSD with
3. Change settings with
4. Go back one step with
5. Confirm selection with
6. Press to exit the OSD menu.

Image Settings

The Image Settings menu offers options to enhance and refine the image characteristics of your Séura Mirror Display. These settings are based on ambient conditions of illumination and personal preferences.

Adjustment options include:

Picture Mode

Brightness

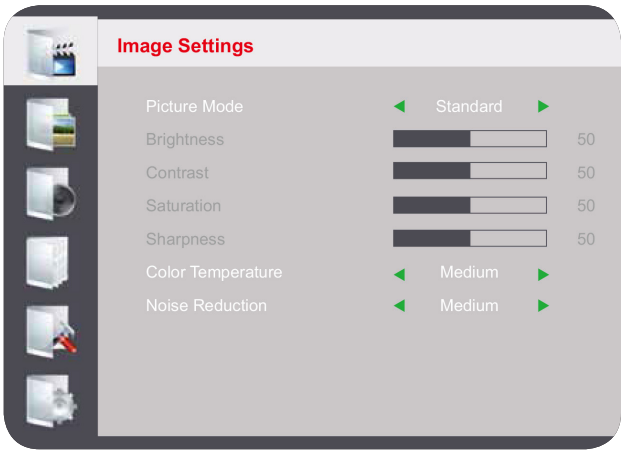
Contrast

Saturation

Sharpness

Color Temperature

Noise Reduction



PICTURE MODE

Within the **Picture Mode** menu you can customize the image display according to your preferences.

Your options: **Dynamic, Standard, Mild, User.**

The **Standard** setting is recommended for most viewing environments. Select the **User Mode** to adjust your preferred settings manually.

You can select: **Brightness, Contrast, Saturation** and **Sharpness.**

COLOR TEMPERATURE

Within the **Color Temperature** menu you can customize the **Color Temperature** of the picture according to your preferences.

Your options: **Cool, Medium, Warm**.

NOISE REDUCTION

Within the **Noise Reduction** menu you can reduce the noise of the picture according to your preferences.

Your options: **Off, Low, Medium, High**.

OSD (cont.)

Display Settings

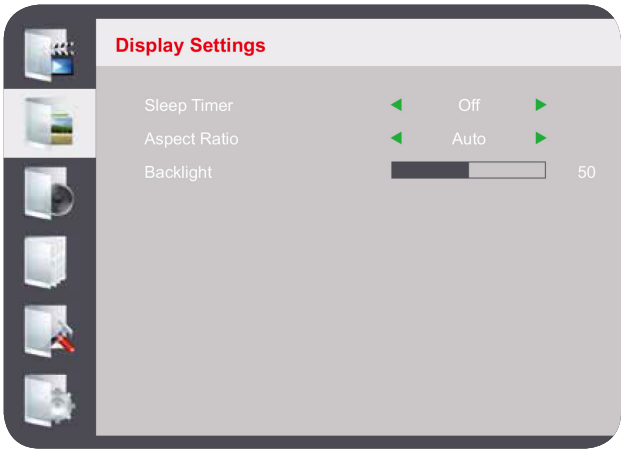
The Display Settings menu offers options to adapt the display characteristics of your Séura Mirror Display based on personal preferences.

Adjustment options include:

Sleep Timer

Aspect Ratio

Backlight.



SLEEP TIMER

Within the **Sleep Timer** menu you can determine a timespan after which the Séura Mirror Display will turn off automatically.

Your options: **Off, 15, 30, 45, 60, 90, 120 minutes.**

The Sleep Timer can also be activated and deactivated directly with sleep on the remote control.

ASPECT RATIO

Within the **Aspect Ratio** menu you can adjust the **Aspect Ratio** of the picture to your preferences.

Your options: **16:9, 4:3, Zoom 1, Zoom 2**

BACKLIGHT

Within the Backlight menu you can adjust the general brightness of the Backlight to your preferences.

Audio Settings

The Audio Settings menu offers options to enhance and refine the sound characteristics of your Séura Mirror Display based on personal preferences.

Adjustment options include:

Sound Mode

Bass

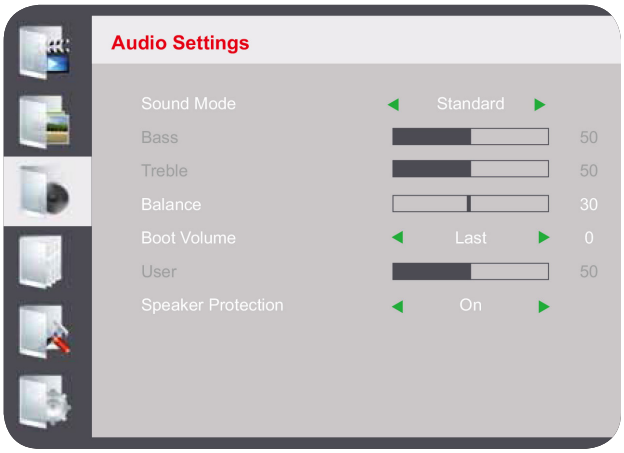
Treble

Balance

Boot Volume

User

Speaker Protection



SOUND MODE

Within the **Sound Mode** menu you can adjust the sound according to your preferences.

Your options: **Standard, Music, Movie, Sports, User**.

The **Standard** setting is recommended for most listening environments. Select the **User Mode** to adjust your preferred settings manually.

BALANCE

Within the **Balance** menu you can adjust the **Balance** between the left and the right speaker.

BOOT VOLUME

Within the **Boot Volume** menu you can define the volume at startup.

Your options: **Last, User.**

If you choose **Last,** the volume at power on is the same as at power off (before the Séura Mirror Display went into standby, default setting). If you choose **User**, you can define the volume level the Séura Mirror Display will set after standby.

SPEAKER PROTECTION

The **Speaker Protection** feature prevents a quick increase in volume to be passed on to the speaker. This prevents damage to the speakers.

OSD Settings

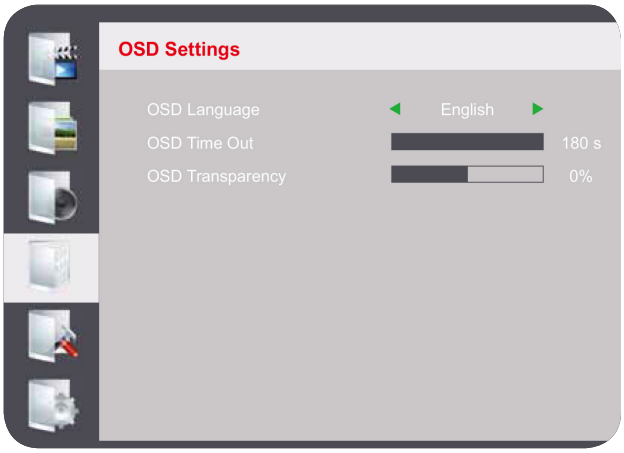
The OSD Settings menu offers options to adapt the OSD characteristics of your Séura Mirror Display based on personal preferences.

Adjustment options include:

OSD Language

OSD Time Out

OSD Transparency



OSD LANGUAGE

Within the **OSD Language** menu you can select the language for the OSD menu.

Your options: **German, English, Spanish, French, Italian, Portuguese, Chinese.**

OSD TIME OUT

Within the **OSD Time Out** menu you can determine the time after the OSD menu turns off automatically with no action from the user.

Your options: **15, 30, 60, 180 seconds.**

OSD TRANSPARENCY

Within the **OSD Transparency** menu you can adjust the Transparency of the OSD menu.

Your options: **0%, 25%, 50%, 75%.**

Setup Settings

The Setup Settings menu offers options to adapt the Hard- and Software characteristics of your Séura Mirror Display based on personal preferences.

Adjustment options include:

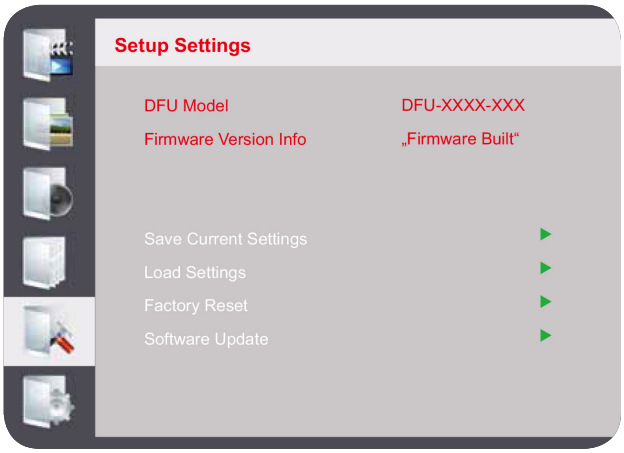
Firmware Version

Save Current Settings

Load Settings

Factory Reset

Software Update



SÉURA MIRROR DISPLAY MODEL / FIRMWARE VERSION INFO

The Séura Mirror Display Model and Firmware Version Info indicate the name of the device and the version of the installed Firmware.

SAVE CURRENT SETTINGS

Within the Save Current Settings menu you can save your current device settings.

LOAD SETTINGS

Within the Load Settings menu you can load previously saved device settings. This will override your current settings.

FACTORY RESET

Within the Factory Reset menu you can restore the factory settings to their default values.

SOFTWARE UPDATE

Within the Software Update menu you can update the Firmware of the Séura Mirror Display via a connected USB media source.

NOTE: Please make sure that the software file on the USB media source is the correct version for your Séura Mirror Display. Please note that every screen size has a corresponding software file. If there is no USB media source connected, an error message “Can´t detect USB” appears.

OSD (cont.)

Service Settings

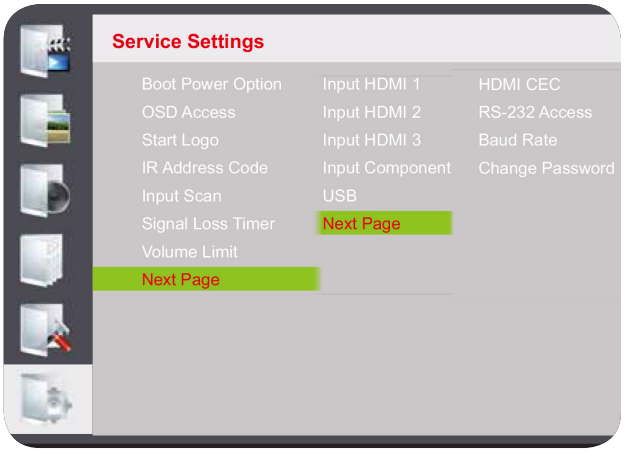
The Service Settings menu offers options to determine fundamental settings of your Séura Mirror Display based on personal preferences.

Adjustment options include:

Boot Power Option
OSD Access
Start Logo
IR Address Code
Input Scan
Signal Loss Timer
Volume Limit
HDMI CEC
RS-232 Access
Baud Rate
Change Password

Additionally you can (de-) activate the Input Source ports **HDMI 1, HDMI 2, HDMI 3., Input Component** and **USB**.

NOTE: To access the Service Settings menu please enter the 4-digit password. The default password is: 1 2 3 4.



BOOT POWER OPTION

The **Boot Power Option** setting determines how the Séura Mirror Display boots after a power interruption.

Your options: **Power on, Standby, Last.**

Power on:	Mirror Display always starts with power on
Standby:	Mirror Display always starts in standby
Last:	Mirror Display will start to the state it had before power failure

OSD ACCESS

With the OSD Access setting you can deactivate the OSD menu. This will deny users access to the OSD.

If OSD Access has been set to Off access can only be reestablished as follows:

1. Press menu
2. When the window with the message “Not Available” appears, enter the 4-digit password.

The default password is: 1234.

START LOGO

With the **Start Logo** setting you can (de-)activate the Séura start-up logo for the Séura Mirror Display.

IR ADDRESS CODE

Within the **IR Address Code** menu you can determine an individual remote address code according to your preferences. Available parameter is from **0** to **61**. The preset **IR Address Code** is **0**.

NOTE: Please bear in mind to program your remote control according to the set code.

INPUT SCAN

With the **Input Scan** setting turned to **On** you can activate the automatic scan of the input ports for input sources. If there is no signal at the currently selected port the Mirror Display searches for a signal on the other ports in the following order: HDMI 1, 2, 3, Component. If a signal is found then the Mirror Display will select this port. See also **Signal Loss Timer** below.

SIGNAL LOSS TIMER

With the **Signal Loss Timer** setting you can set the time the **Input Scan** will be performed. If **Signal Loss Timer** is set off the search will continue indefinitely or until a signal is found. If **Signal Loss Timer** is set to **5, 10, 30, 60, 120** seconds the Mirror Display switches to standby mode if no alternative signal was found within the chosen time.

VOLUME LIMIT

With the **Volume Limit** setting you can determine a maximum volume according to your preferences. This setting is useful to prevent a user from increasing the volume above a certain level e.g. in a hotel not to disturb neighboring rooms.

INPUT PORTS

Within the **Service Settings** menu you also have the possibility to (de-)activate the input ports. If an input port is set **Off** it will not be accessible in the **Input Source Selection**.

Available input ports: **HDMI 1, HDMI 2, HDMI 3, Component (YPbPr), USB**.

NOTE: Please notice that if USB is set Off this does not affect the Software Update function. The Software Update function is always possible even if the USB input port is set Off.

OSD (cont.)

HDMI CEC

With the **HDMI CEC (Consumer Electronics Control)** setting you can enable or disable the Mirror Display to be controlled with the remote control of a CEC compatible connected external media source.

RS-232 ACCESS

With the **RS-232 Access** setting you can (de-)activate the RS-232 functionality. With RS-232 commands the Mirror Display can be controlled by interactive multimedia solutions like home automation or hospitality TV systems.

For more details see the following link: www.seura.com/Resources/Technical/Seura-RS232Control-4-10-13.pdf

BAUD RATE

Set the Baud Rate to your preferred setting. It has to be equal to the value of your external device.

Your options: **9600, 19200,** or **38400**. Default is **38400**.

CHANGE PASSWORD

With the Change Password setting you can define your own 4-digit password. **The default password is: 1234**. If you forgot your password you have to perform a software update and will lose all your individual settings.

NOTE: It is not possible to reset a forgotten password with a factory reset!

USB Media Player

Within the Factory Settings the **USB** input port is deactivated. In order to activate the **USB media player** please follow the instructions in section **Service Settings / Input Ports.**

Available digital media formats:

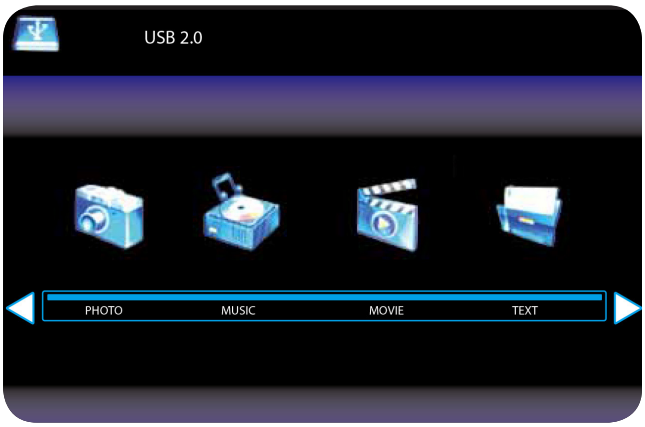
PHOTO

MUSIC

MOVIE

TEXT

NOTE: In order to have access to the USB port after Mirror Display installation we recommend installing a USB extension cable.



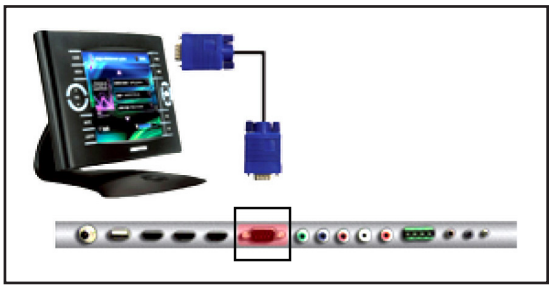
Supported Formats

Photo	JPG (JPG / JPE) max. display resolution 3000 x 3000, min. display resolution 100 x 100 PNG (PNG) max. display resolution 1000 x 1000, min. display resolution 100 x 100 BMP (BMP) supported mono color, 16 color, 256 color, 16 bit, 24 bit, 32 bit max. display resolution 3000 x 3000, Photo min. display resolution 100 x 100
Movie	MPEG4 (AVI / MP4 / DIVX4 / DIVX5 / XVID) max. bit rate 6 Mbps, max. display resolution 720 x 576p. MPEG 1 / 2 (MPG / MPE / VOB / DAT / TRP / TS) max. bit rate 9.8 Mbps.
Music	MP3 (MP3) sample rate 8k - 48k bit rate 32k - 320k WMA (WMA / ASF) sample rate 8k - 48k bit rate 32k - 320k AAC (M4A / AAC) sample rate 16k - 48k bit rate 32k - 192k
Text	TXT

RS -232 Control

Introduction

The Séura S1 Series LCD displays can be controlled with RS-232 commands from a host (computer, system controller such as Crestron, Control4, Savant, etc.). This document describes the details of this protocol.



RS-232 Communication Protocol

This section describes the communication protocol used to control the Séura S1 Series remotely.

Note: Some commands will generate OSD feedback.
Note: IR Commands will generate serial feedback.

Connect a Host to the S1

Connect the S1 to the host controller using a crossed (null modem) serial cable or a straight-through cable with a null modem adapter.

RS-232 Communication Parameters

Baud Rate	9600, 19200, 38400
Parity	None
Data Bits	8
Stop Bits	1
Flow Control	None

Baud rate is configurable from the OSD Service Menu.
Default baud rate is 38400.

Default access password for Service Menu is 1 2 3 4

Timing

General timing constraints:

- Wait 10 seconds after power ON command before sending next command.
- Wait for response (ACK message) before sending next command
- Minimum 2 seconds delay before resending a command if no response received.
- Minimum 500ms delay between commands.
- Minimum 5 seconds delay after sending 20 commands.

Séura S1 RS-232 Protocol

Command Structure

A Séura S1 RS-232 command consists of a header, an identifier, an optional separator and value and a terminator.

A command shall contain no spaces between fields.

A command always begins with an “&” (ampersand, no quote marks).

A command is always 9 bytes long including the carriage return. If the value field uses less than 3 bytes the missing characters shall be filled with “*” (asterisk, no quote marks).

Command Structure

Field	Description	Length	Comment
Header	ASCII character &	1 byte	Required
Identifier	Key identifier, case sensitive	3 bytes	Required
Separator	Character symbol (: or ?)	1 byte	Optional
Value	Value	3 bytes	Optional
Terminator	CR carriage return (0x0D)	1 byte	Required

Examples for identifiers: PWR, BAS, SRC
Separators:

: (colon) Value change. Value given will replace existing value
Example: &SRC:USB will change the input to USB

? (question mark) Get current value

Acknowledgement Structure

The S1 shall confirm each command it receives with an acknowledgement automatically. Acknowledgement is ON by default. Acknowledgement can be turned ON and OFF with the ECHO command.

An acknowledgement consists of a header, an identifier, a separator, a value and a terminator.

An acknowledgement always begins with a "%" (percent, no quote marks).

An acknowledgement is always 9 bytes long including the carriage return. If the value field uses less than 3 bytes the missing characters will be filled with "*" (asterisk, no quote marks).

Field	Description	Length	Comment
Header	ASCII character % (percent)	1 byte	Required
Identifier	Key identifier, case sensitive	3 bytes	Required
Separator	Character symbol : (colon)	1 byte	Optional
Value	Value	3 bytes	Optional
Terminator	CR carriage return (0x0D)	1 byte	Required

Error Messages

Most acknowledgements return the actual value of the requested command. If the requested command is not valid an error message will be returned instead.

An error message always begins with an "!" (exclamation mark, no quote marks).

Code	Error Message	Description
!ERR:001	Access denied	Command disabled by unit settings
		Example: Trying to switch to USB input while this input is disabled in Service Settings
!ERR:002	Not available	Command currently not available
		Example: Trying to change brightness while unit is in Input scan mode
!ERR:003	Not implemented	Command not implemented in this model
		Example: &SRC:VGA
!ERR:004	Value out of range	Value out of range
		Example: &SLP:080

RS-232 Examples

<CR> ASCII value carriage return, hex value 0x0D

Set Power ON

&	P	W	R	:	O	N	*	<CR>

&PWR:ON*<CR>

Acknowledge Power ON

%	P	W	R	:	O	N	*	<CR>

%PWR:ON*<CR>

Set Sleep Timer to 30 Minutes

&	S	L	P	:	0	3	0	<CR>

&SLP:030<CR>

Acknowledge Sleep Timer

%	S	L	P	:	0	3	0	<CR>

%SLP:030<CR>

Increment Volume

&	V	O	L	:	U	P	*	<CR>

&VOL:UP*<CR>

Acknowledge Volume

%	V	O	L	:	0	6	3	<CR>

%VOL:063<CR>

Increment Balance to Left

&	B	A	L	:	L	T	*	<CR>

&BAL:LT*<CR>

Acknowledge Balance

%	B	A	L	:	-	0	1	<CR>

%BAL:-01<CR>

RS-232 Commands
S1 Premier Series

Function	Command (Tx)	ACK (Rx)
Power Toggle	&PWR:TOG	%PWR:TOG
Power ON	&PWR:ON*	%PWR:ON*
Power OFF	&PWR:OFF	%PWR:OFF
Get Power Status	&PWR?***	
OFF		%PWR:OFF
ON		%PWR:ON*
Boot set to ON	&BOT:ON*	%BOT:ON*
Boot set to STANDBY	&BOT:SBY	%BOT:SBY
Boot set to LAST	&BOT:LST	%BOT:LST
Get Boot Setup	&BOT?***	
ON		%BOT:ON*
STANDBY		%BOT:SBY
LAST		%BOT:LST
Signal Loss 5 Sec	&SLS:05s	%SLS:05s
Signal Loss 10 Sec	&SLS:10s	%SLS:10s
Signal Loss 30 Sec	&SLS:30s	%SLS:30s
Signal Loss 1 min	&SLS:001	%SLS:001
Signal Loss 2 min	&SLS:002	%SLS:002
Signal Loss OFF	&SLS:OFF	%SLS:OFF
Get Signal Loss Setup	&SLS?***	
5 Sec		%SLS:05s
10 Sec		%SLS:10s
30 Sec		%SLS:30s
1 min		%SLS:001
2 min		%SLS:002
OFF		%SLS:OFF
Sleep Timer 15 min	&SLP:015	%SLS:015
Sleep Timer 30 min	&SLP:030	%SLS:030
Sleep Timer 45 min	&SLP:045	%SLS:045
Sleep Timer 60 min	&SLP:060	%SLS:060
Sleep Timer 90 min	&SLP:090	%SLP:090
Sleep Timer 120 min	&SLP:120	%SLP:120
Sleep Timer OFF	&SLP:OFF	%SLP:OFF
Get Sleep Timer Status	&SLP?***	
15 min		%SLP:015
30 min		%SLP:030
45 min		%SLP:045
60 min		%SLP:060
90 min		%SLP:090
120 min		%SLP:120
OFF		%SLP:OFF
Digit 1	&NUM:001	%NUM:001
Digit 2	&NUM:002	%NUM:002
Digit 3	&NUM:003	%NUM:003
Digit 4	&NUM:004	%NUM:004
Digit 5	&NUM:005	%NUM:005
Digit 6	&NUM:006	%NUM:006
Digit 7	&NUM:007	%NUM:007
Digit 8	&NUM:008	%NUM:008
Digit 9	&NUM:009	%NUM:009
Digit 0	&NUM:000	%NUM:000
OK	&CRS:OK*	%CRS:OK*
Up	&CRS:UP*	%CRS:UP*
Down	&CRS:DN*	%CRS:DN*
Left	&CRS:LT*	%CRS:LT*
Right	&CRS:RT*	%CRS:RT*
Volume +	&VOL:UP*	%VOL:XXX [XXX]= [000]-[100]
Volume -	&VOL:DN*	
Get Volume Level	&VOL?***	
Mute Toggle	&MUT:TOG	%PWR:TOG
Mute ON	&MUT:ON*	%MUT:ON*
Mute OFF	&MUT:OFF	%MUT:OFF
Get Mute Status	&MUT?***	
ON		%MUT:ON*
OFF		%MUT:OFF
Play	&FNC:PLY	%FNC:PLY
Pause	&FNC:PSE	%FNC:PSE
Stop	&FNC:STP	%FNC:STP
Skip Forward / Chapter +	&FNC:NXT	%FNC:NXT
Skip Backwards / Chapter -	&FNC:PRV	%FNC:PRV
Fast Forward	&FNC:FWD	%FNC:FWD
Fast Backward	&FNC:RWD	%FNC:RWD
Exit	&EXT:***	%EXT:***
OSD Access ON	&OSA:ON*	%OSA:ON*
OSD Access OFF	&OSA:OFF	%OSA:OFF
Get OSD Access Status	&OSA?***	
Access ON		%OSA:ON*
Access OFF		%OSA:OFF

Function	Command (Tx)	ACK (Rx)
OSD Toggle	&OSD:TOG	%OSD:TOG
OSD ON (open)	&OSD:ON*	%OSD:ON*
OSD OFF (close)	&OSD:OFF	%OSD:OFF
Get OSD Status	&OSD?***	
ON		%OSD:ON*
OFF		%OSD:OFF
Input HDMI 1	&SRC:HD1	%SRC:HD1
Input HDMI 2	&SRC:HD2	%SRC:HD2
Input HDMI 3	&SRC:HD3	%SRC:HD3
Input Component	&SRC:RGB	%SRC:RGB
Input USB / DMP	&SRC:USB	%SRC:USB
Get Input Status	&SRC?***	
Component		%SRC:RGB
HDMI 1		%SRC:HD1
HDMI 2		%SRC:HD2
HDMI 3		%SRC:HD3
USB / DMP		%SRC:USB
Aspect 16:9	&ASP:169	%ASP:169
Aspect 4:3	&ASP:043	%ASP:043
Zoom 1	&ASP:ZM1	%ASP:ZM1
Zoom 2	&ASP:ZM2	%ASP:ZM2
Get Aspect Status	&ASP?***	
16:9		%ASP:169
4:3		%ASP:043
Zoom 1		%ASP:ZM1
Zoom 2		%ASP:ZM2
Picture Mode Standard	&PCT:STD	&PCT:STD
Picture Mode User	&PCT:USR	&PCT:USR
Picture Mode Dynamic	&PCT:DYN	&PCT:DYN
Picture Mode Mild	&PCT:MLD	&PCT:MLD
Color Temp Cool	&PCT:COL	%PCT:COL
Color Temp Medium	&PCT:MED	%PCT:MED
Color Temp Warm	&PCT:WRM	%PCT:WRM
Brightness +	&BRT:UP*	%BRT:XXX [XXX]=[000]-[100]
Brightness -	&BRT:DN*	
Get Brightness Level	&BRT?***	
Contrast +	&CON:UP*	%CON:XXX [XXX]= [000]-[100]
Contrast -	&CON:DN*	
Get Contrast Level	&CON?***	
Color Saturation +	&STR:UP*	%STR:XXX [XXX}=[000]-[100]
Color Saturation -	&STR:DN*	
Get Saturation Level	&STR?***	
Sharpness +	&SRP:UP*	%SRP:XXX [XXX]=[000]-[100]
Sharpness -	&SRP:DN*	
Get Sharpness Level	&SRP?***	
Backlight +	&BLT:UP*	%BLT:XXX [XXX]=[000]-[100]
Backlight -	&BLT:DN*	
Get Backlight Level	&BLT?***	
Audio Mode Standard	&AUD:STD	%AUD:STD
Audio Mode Music	&AUD:MUS	%AUD:MUS
Audio Mode Movie	&AUD:MOV	%AUD:MOV
Audio Mode Sports	&AUD:SPR	%AUD:SPR
Audio Mode User	&AUD:USR	%AUD:USR
Bass +	&BAS:UP*	%BAS:XXX [XXX]=[000]-[100]
Bass -	&BAS:DN*	
Get Bass Level	&BAS?***	
Treble +	&TRB:UP*	%TRB:XXX [XXX]=[000]-[100]
Treble -	&TRB:DN*	
Get Treble Level	&TRB?***	
Balance Left	&BAL:LT*	%BAL:XXX [XXX]=[-50][000][+50]
Balance Right	&BAL:RT*	
Get Balance Level	&BAL?***	
Boot Volume Level +	&BVL:UP*	&BVL:XXX [XXX]=[000]-[100]
Boot Volume Level -	&BVL:DN*	
Get Boot Volume Level	&BVL?***	
Set RS232 Echo ON[1]	&ECO:ON*	%ECO:ON*
Set RS232 Echo OFF[1]	&ECO:OFF	%ECO:OFF

[1] Echo-ON enables, Echo=OFF disables RS232 ACK messages

Seura Remote Hexadecimal Codes

Power Toggle
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 0047 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0718 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 06A0

Menu
0000 006B 0000 0020 000A 0048 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0768 000A 0048 000A 001F 000A 001F 000A 001F 000A 001F 000A 0048 000A 0048 000A 0048 000A 0048 000A 0048 000A 001F 000A 0048 000A 0048 000A 001F 000A 0048 000A 0654

Source
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 0047 000A 001F 000A 0047 000A 001F 000A 06C8 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 06F2

Display
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 0047 000A 0047 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 06D4 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 06C7

Exit
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 0047 000A 0047 000A 001F 000A 0685 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 071A

Up Arrow
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 06C8 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 06F6

Down Arrow
0000 006B 0000 0020 000A 0048 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0048 000A 001F 000A 0048 000A 001F 000A 0048 000A 001F 000A 0718 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0048 000A 001F 000A 0047 000A 001F 000A 0047 000A 06A4

Left Arrow
0000 006B 0000 0020 000A 0048 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0048 000A 001F 000A 0048 000A 001F 000A 0048 000A 001F 000A 0718 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0048 000A 001F 000A 0047 000A 001F 000A 0047 000A 06A4

Right Arrow
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 0047 000A 0047 000A 0047 000A 0047 000A 0047 000A 001F 000A 06A0 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 071B

Enter
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Sleep
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 06FC 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 059B

Zoom
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0048 000A 0048 000A 001F 000A 0740 000A 0048 000A 001F 000A 001F 000A 001F 000A 001F 000A 0048 000A 0048 000A 0047 000A 0048 000A 0047 000A 001F 000A 0048 000A 001F 000A 001F 000A 001F 000A 0048 000A 068B

EPG
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Mute
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 06D4 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 06C9

ch+
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0048 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0740 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 001F 000A 001F 000A 0047 000A 067E

ch-
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vol+
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0740 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 067C

vol-
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0718 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 06A8

1
0000 006C 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 074A 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 0047 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 0652

2
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3
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0723 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 067D

4
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0768 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 0047 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 054F

5
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0740 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 067E

6
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0718 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 06A7

7
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0718 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 06A6

8
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9
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 001F 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 001F 000A 001F 000A 0740 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 067E

0
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0740 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 0678

. (Dot)
0000 006C 0000 0020 000A 0046 000A 001E 000B 001E 000A 001E 000B 0047 000A 001E 000B 0046 000A 001E 000B 0046 000A 0046 000A 0046 000B 001E 000A 001E 000B 0046 000B 001D 000B 06A5 000B 0046 000B 001E 000A 001E 000A 001E 000A 0046 000B 0046 000A 001E 000B 0046 000A 001F 000A 001E 000A 001E 000A 0046 000A 0046 000A 001E 000A 0045 000A 0696

Enter
0000 006B 0000 0020 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 0047 000A 001F 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 06FC 000A 0047 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 001F 000A 0047 000A 0047 000A 0047 000A 0047 000A 001F 000A 0047 000A 06A1

Discrete Remote Hexadecimal Codes

Power On (only)
0000 006d 0000 0020 000a 0047 000a 001e 000a 001e 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 068b 000a 0047 000a 001e 000a 001e 000a 001e 000a 0047 000a 0047 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 068b

Power Off (only)
0000 006d 0000 0020 000a 0047 000a 001e 000a 001e 000a 001e 000a 0047 000a 0047 000a 0047 000a 001e 000a 0047 000a 001e 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 068b 000a 0047 000a 001e 000a 001e 000a 001e 000a 001e 000a 0047 000a 001e 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 068b

HDMI 1 (INPUT 1)
0000 006d 0000 0020 000a 0047 000a 001e 000a 001e 000a 001e 000a 001e 000a 001e 000a 0047 000a 001e 000a 001e 000a 0047 000a 0047 000a 001e 000a 001e 000a 0047 000a 001e 000a 068b 000a 0047 000a 001e 000a 001e 000a 001e 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 068b

HDMI 2 (INPUT 2)
0000 006d 0000 0020 000a 0047 000a 001e 000a 001e 000a 001e 000a 001e 000a 0047 000a 0047 000a 001e 000a 001e 000a 0047 000a 0047 000a 001e 000a 001e 000a 0047 000a 001e 000a 068b 000a 0047 000a 001e 000a 001e 000a 001e 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 0047 000a 001e 000a 068b

HDMI 3 (INPUT 3)
0000 006d 0000 0020 000a 001e 000a 0047 000a 0047 000a 0047 000a 0047 000a 0047 000a 0047 000a 001e 000a 001e 000a 001e 000a 001e 000a 001e 000a 0047 000a 001e 000a 068b 000a 001e 000a 0047 000a 0047 000a 0047 000a 0047 000a 001e 000a 001e 000a 0047 000a 0047 000a 0047 000a 0047 000a 001e 000a 001e 000a 0047 000a 068b

YPbPr (INPUT 4)
0000 006d 0000 0020 000a 001e 000a 0047 000a 0047 000a 0047 000a 0047 000a 0047 000a 001e 000a 001e 000a 001e 000a 001e 000a 001e 000a 001e 000a 001e 000a 0047 000a 0047 000a 001e 000a 068b 000a 001e 000a 0047 000a 0047 000a 0047 000a 0047 000a 0047 000a 001e 000a 001e 000a 0047 000a 001e 000a 0047 000a 0047 000a 0047 000a 0047 000a 001e 000a 001e 000a 0047 000a 068b

USB (INPUT 5)
0000 006d 0000 0020 000a 0047 000a 001e 000a 001e 000a 001e 000a 001e 000a 001e 000a 0047 000a 0047 000a 001e 000a 001e 000a 0047 000a 001e 000a 0047 000a 0047 000a 0047 000a 001e 000a 068b 000a 0047 000a 001e 000a 001e 000a 001e 000a 001e 000a 0047 000a 001e 000a 001e 000a 001e 000a 001e 000a 0047 000a 0047 000a 001e 000a 001e 000a 001e 000a 0047 000a 068b

Download these codes at http://www.seura.com/IRCodes.doc

Troubleshooting

If the product is not working properly, please check the following troubleshooting hints before you contact customer service:

Symptoms	Possible Solution
Blank screen	Check the status LED. If the status LED is red, the Mirror Display is in standby and the monitor is black, this is normal. If the status LED is green and the monitor is black, the Mirror Display might perform an input scan with no available signal. Please check if an input source is available and that the port of the device has been connected correctly in the Service Settings/ Input Ports menu. Press “Menu” on your remote control: you should see the OSD menu. Check your settings for misconfigurations and adjust accordingly. Alternatively, perform a factory reset to restore the Mirror Display to its default settings. If the problem still exists contact customer service.
Color defects	Check that the signal cable connector is properly connected and that the connection pins are not bent or damaged.
The image is unsatisfactory	Adjust the picture characteristics as described in the above-mentioned section “Image Settings”. Image is not stable Check that the display resolution and frequency from your media source is compatible with the Mirror Display.
Error message: “No Signal”	Check that the connected media sources are switched on. Check that the signal cable connector is properly connected and that the connection pins are not bent or damaged. Press “Menu” on your remote control: you should see the OSD menu. Check your settings for misconfigurations and adjust accordingly. Alternatively, perform a factory reset to restore the Mirror Display to its default settings. If the problem still exists contact customer service.
Low or no sound	Press “Volume Up” and/or “Volume Down” on your remote control and check the audio connection cable(s). Make sure that the Volume Limit setting in the Service Settings menu has been set to an audible value.
Remote control doesn’t work	Press a button on the remote control and check that the status LED of the Mirror Display flashes briefly. If it doesn´t, replace the batteries of the remote control with new ones.

NOTE: If the above troubleshooting hints do not help you to find a solution, please contact Séura.

Technical Features

Features	32"	42"	46"	55"	65"
Display Backlight	TFT Thin Film Transistor | LED Backlight				
Active Screen Area W x H	27.48" x 15.47"	36.61" x 20.59"	40.12" x 22.56"	47.60" x 26.77"	56.22" x 31.61"
Diagonal	31.5"	42.0"	46.0"	54.6"	64.53"
Picture Format	16:9				
Physical Resolution	1920 x 1080				
Viewing Angle	Horizontal Typical (Total) 178° (Left: 89° / Right: 89°) Vertical Typical (Total) 178° (Up: 89° / Down: 89°)	Horizontal Typical (Total) 178° (Left: 89° / Right: 89°) Vertical Typical (Total) 178° (Up: 89° / Down: 89°)	Horizontal Typical (Total) 176° (Left: 88° / Right: 88°) Vertical Typical (Total) 176° (Up: 88° / Down: 88°)	Horizontal Typical (Total) 176° (Left: 88° / Right: 88°) Vertical Typical (Total) 176° (Up: 88° / Down: 88°)	Horizontal Typical (Total) 178° (Left: 89° / Right: 89°) Vertical Typical (Total) 178° (Up: 89° / Down: 89°)
Brightness	450 cd/m2	450 cd/m2	450 cd/m2	450 cd/m2	360 cd/m2
Contrast	Typical 4000:1	Typical 4000:1	Typical 5000:1	Typical 4000:1	Typical 4000:1
Response Time	8ms	6.5ms	6ms	4.5ms	5.5ms
Power Consumption	DC 24V 80.88W / 3.37A	DC 24V 110.64W / 4.61A	DC 24V 74.40W / 3.10A	DC 24V 194.4W / 8.10A	DC 24V 576W / 24A
Weight (Monitor Only, does not include Mirror or Metal Housing)	23.8 lbs	36.6 lbs	49.6 lbs	63.1 lbs	125.9 lbs
Operating Temperature	32° to 122° Fahrenheit				
Humidity	20 - 80% RH, Non-Condensing				
OSD Languages	Deutsch, English, Español, Français, Italiano, Português, 中文				
Certification	UL 60950-1 , CAN / CSA 22.2 - 60950-1, CE, FCC, EN 60950-1, EMC 55022, EN 6100-3-2				

NOTE: Above specification may be changed without prior notification for quality improvement.

Ports and Media Support

Ports

Input Ports	LINE Audio INPUT	2 x RCA terminal, white, red
	Component Input	3 x RCA terminal, red, green, blue
	HDMI™ Input	3 x HDMI™ terminal
	USB	1 x USB terminal
	RS232	1 x D-SUB 9pin male
	IR Input (Infrared)	1 x mini jack 3.5mm
Output Ports	Speaker Output	1 x Phoenix clip 4pin
	IR Output (cable)	1 x mini jack 3.5mm
	IR Output (LED)	1 x mini jack 2.5mm
Video	HDMI™	480i, 480p, 576i, 576p, 720p, 1080i, 1080p
	Component (YPbPr / YCbCr)	480i, 480p, 576i, 576p, 720p, 1080i, 1080p
Audio Output	Speaker Output	2 x 8W RMS @ 8Ω per channel

Special Features

Multimedia Player	USB
Software Update	USB
Autostart	Yes
Signal Scan	Yes
Hotel Mode	Yes
RS-232	Yes
Noise Reduction	3D

USB Media Support

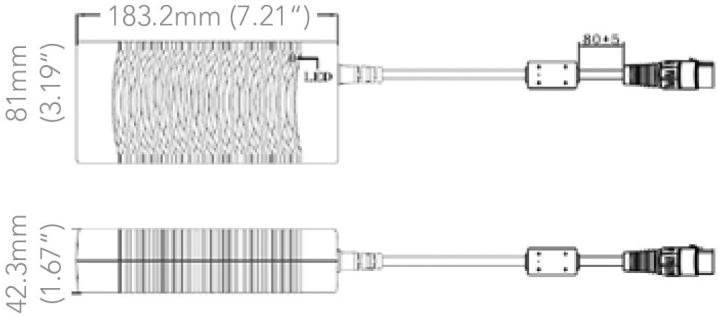
USB Media Support	File Extension	Video	Audio
Movie	.avi	DivX, XviD, MPEG-4	MP3, WMA, AAC
	.mpg	MPEG-1, MPEG-2	
	.dat	MPEG-1	
	.mov / .mkv	H.264	
Music	.mp3	--	MP3
	.wma	--	WMA
	.m4a / .aac	--	AAC
Photo	.jpg / .jpeg	Progressive JPG	
		Baseline JPEG	
	.bmp	BMP	
	.png	Non-Interlaced	
		Interlaced	
Text	.txt		

NOTE: Above specification may be changed without prior notification for quality improvement.

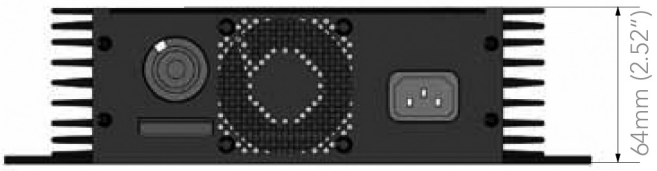
Power Adapters

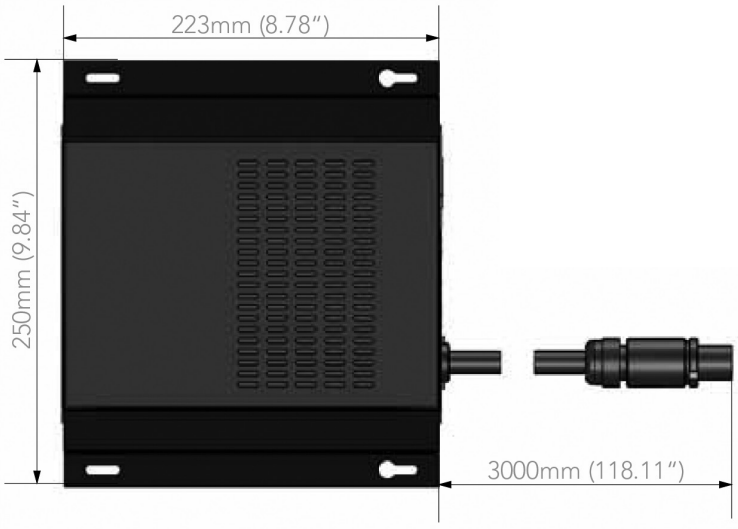
Display Size	Power	Voltage Input	Voltage Output	Operating Temperature	Humidity	Weight
32"	200W / 8.3A	100 ~ 240V AC	24V DC	32 - 104° F	20 - 90%	1.8 lbs
42"	200W / 8.3A	100 ~ 240V AC	24V DC	32 - 104° F	20 - 90%	1.8 lbs
46"	200W / 8.3A	100 ~ 240V AC	24V DC	32 - 104° F	20 - 90%	1.8 lbs
55"	600W / 25.0A	100 ~ 240V AC	24V DC	32 - 104° F	20 - 90%	7.8 lbs
65"	600W / 25.0A	100 ~ 240V AC	24V DC	32 - 104° F	20 - 90%	7.8 lbs

Power Supply for 32-46" Mirror Displays



Power Supply for 55-65" Mirror Displays





Product Limited Warranty

If a Séura, Inc. ("Séura") product (the "Product") fails to work or operate properly because of a defect in materials or workmanship, Séura will, for the length of the period indicated below (starting on the date of the Product's purchase receipt for the Product), at its option, either (a) repair the Product with new or refurbished parts, including Séura's labor if applicable; or (b) replace the Product with a new or refurbished product. The decision to repair or replace the Product shall be in Séura's sole discretion.

Séura warrants **Lighted Mirrors** with respect to Séura's Labor for three (3) years; Mirror, Glass, Structure, Frame, and Assembly for three (3) years; Electrical for three (3) years. Lamps are not warranted.

Séura warrants **TV Mirrors** with respect to Séura's Labor for three (3) years; Mirror, Glass, Structure, Frame, and Assembly for three (3) years; TV including remote and power supply for one (1) year.

Séura warrants **Lighted Mirror TVs** with respect to Séura's Labor for three (3) years; Mirror, Glass, Structure, Frame, and Assembly for three (3) years; TV including remote and power supply for one (1) year; Electrical excluding TV for three (3) years. Lamps are not warranted.

Séura warrants **Hydra Waterproof TVs** with respect to Séura's Labor for three (3) years; Mirror, Glass, Structure, Frame, and Assembly for three (3) years; TV including remote and power supply for one (1) year.

Séura warrants **Storm Outdoor TVs** with respect to Séura's Labor for two (2) years; Glass, Structure, Frame, and Assembly for two (2) years; TV including remote and power supply for one (1) year.

This Limited Warranty extends only to the original purchaser of a Product and only covers a Product purchased new. Séura reserves the right to require any warranty claimant to produce the original purchase receipt or other original purchase date proof as may be reasonably required by Séura to verify the Product's warranty eligibility.

1. **Exceptions to Warranty**: Séura does not warrant the Products against defects arising out of, related to, or caused by, whether totally or partially, and whether directly or indirectly, any of the following:

A. Cleaning and maintenance of, or failing to properly clean and maintain, any Product, part or component of a Product, including, but not limited to, filters, front bezel, and other Product areas or components;

B. A Product's extended use, including particularly, commercial applications, where a Product is operating on average more than six (6) hours per day on a permanent or extended periodic basis;

C. Circumstances, damage (including concealed damage) or other conditions occurring during shipment of a Product or at any time after a Product leaves Séura's facility;

D. Circumstances, damage or other conditions occurring during unpacking and/or removal of a Product from its original packaging, including the removal of protective material;

E. Circumstances, damage or other conditions occurring during transport of the Product to or from Séura before or after authorized service. Products must be packed properly using original packaging or Séura replacement or pre-authorized packaging. Customer assumes all risk, while in transit to or from Séura, and shall be responsible for any costs incurred in transporting the Product.

F. Improper, incorrect, or insufficient AC supply voltage to a Product;

G. Alterations, modifications or changes to a Product without Séura's prior written authorization;

H. The incorporation of a Product into or within a product of a third party, without Séura's prior written authorization;

I. A Product's misuse, neglect use, abuse, or improper operation, including the failure to follow a Product's normal and ordinary operating instructions;

J. The effects of fire, flood, lightning, electrical surges, water and other liquid infiltration, smoke, and other substances not intended to come into contact with a Product, including any such substances contact with a Product as the result of acts of God;

K. The improper or faulty installation, setup, or adjustment of a Product;

L. A Product's repair, attempted repair, or total or partial disassembly by any party other than a Séura authorized service representative;

M. When the product occurs with pixel errors within the specified and permitted area. For more information about this, inquire directly with Seura regarding the Seura Pixel Policy.

N. Corrosion that does not affect the performance of a Product or the reasonable cosmetic appearance of a Product; and

O. Scratches or other paint or finish damage to a Product that lead to or are caused by, in part or in total, corrosion.

2. **Warranty Disqualifiers.** This Limited Warranty does not apply, and Séura makes no warranties or representations, with respect to any Product being free from defects in materials or workmanship if the Product was purchased from a seller who is not authorized, by Séura, to sell Séura products, is owned by or is in possession of an individual or entity who is not the original purchaser of the Product, or if the Product's original Séura serial number has been removed, defaced, replaced, or otherwise tampered with in any manner.

3. **Limitation of Liability.** THE SPECIFIC TERMS OF THIS LIMITED WARRANTY ARE IN LIEU OF ALL OTHER WARRANTIES, ORAL, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR USE. SÉURA WILL NOT BE LIABLE FOR ANY LOSS, DAMAGE OR LIABILITY OR ANY DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR MISUSE OF A PRODUCT, OR ARISING OUT OF ANY BREACH, BY THE PURCHASER OF A PRODUCT, OF THIS LIMITED WARRANTY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR LIMITATIONS ON HOW LONG AN IMPLIED LIMITED WARRANTY LASTS, SO THE EXCLUSIONS MAY NOT APPLY TO A PARTICULAR PURCHASER. NOTWITHSTANDING ANYTHING CONTAINED IN THIS LIMITED WARRANTY TO THE CONTRARY, SÉURA'S MAXIMUM LIABILITY TO A PURCHASER RELATED TO ANY WARRANTY CLAIM OR ALLEGATION OF A DEFECT WITH RESPECT TO A PRODUCT SHALL NOT EXCEED THE THEN CURRENT SÉURA WHOLESALE PRICE OF THE SPECIFIC PRODUCT FROM WHICH THE WARRANTY CLAIM DERIVES.

NOTICE OF ANY WARRANTY CLAIM MUST BE RECEIVED BY SÉURA, IN WRITING, PRIOR TO THE EXPIRATION OF THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. THE PRODUCT WARRANTY APPLIES ONLY FOR THE PERIODS SET FORTH ABOVE.

4. **Warranty Procedure.** Prior to returning any Product to Séura, a warranty claimant must contact Séura at **920- 857-9069** to obtain a return goods authorization (RGA) number and, if applicable, specific return and shipping instructions. A Product will only be accepted for warranty claims if returned and shipped to Séura in the Product's original packaging materials. If original packaging is not available, please contact Séura to receive authorized replacement packaging. Packages not bearing the issued returned goods authorization (RGA) number will not be accepted by Séura and will be returned to sender. In addition to the Product, the package must include the warranty claimant's original sales receipt for the purchase of the Product. All Product returns shall be received by Séura, at **1230 Ontario Road; Green Bay, WI 54311** with freight prepaid by the warranty claimant. Séura shall not be responsible for, and the warranty claimant assumes and retains all such responsibility, any damage or loss to or of the Product during shipment to Séura as the result of a warranty claim.
5. **Exclusive Remedy**. This Limited Warranty sets forth the exclusive remedies of a warranty claimant with respect to allegations of a defective Product.

SÉURA®

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